

Exhibit 9

(Part III)

RECEIVED
MAY 27 1987

CASE 3528

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of

DAVID C. HECKERT :

Serial No. 860,607 :

Group Art Unit 132

Filed May 7, 1986 :

Examiner C. Paden

FRUIT JUICE BEVERAGES AND

JUICE CONCENTRATES NUTRI-

TIONALLY SUPPLEMENTED WITH CALCIUM

W. J. D. D.
W. J. D. D.
*6-1-88*DECLARATION OF TIMOTHY W. DAKE PURSUANT TO 37 CFR 1.132

I, Timothy W. Dake, declare as follows:

1. I am familiar with the subject matter of the present invention disclosed and claimed in the above application.
2. I received a B.S. degree in Chemical Engineering from the University of Toledo in 1972, and an M.S. degree in Chemical Engineering from the University of Toledo in 1973. I have been employed at The Procter & Gamble Company, the assignee of the above application, since September of 1973, and have been involved in its beverage program since August of 1977.
3. I was present at the interview of the above application which took place on March 2, 1987. At this interview, single-strength samples of orange and grapefruit juice beverages of the present invention, similar to those shown in photograph 1 attached to this Declaration, were offered to the Examiners. The juice content (single-strength basis), calcium content, total acid level (combined citric and malic acid) and weight ratio of citric to malic acid of these beverages (calculated) were as follows:

	<u>Orange</u>	<u>Grapefruit</u>
Juice Content	60%	60%
Calcium Content	0.137%	0.124%
Total Acid Level	1.42%	1.99%
Ratio Citric:Malic	72:28	81:19

4. The samples of orange and grapefruit juice beverages of paragraph 3 were prepared at my direction by combining distilled water with the

-2-

respective calcium-supplemented orange or grapefruit juice concentrate of the present invention in a 3 to 1 volume ratio. The calcium content, total acid level (combined citric and malic acid) and weight ratio of citric to malic acid of these concentrates (calculated) were as follows:

	<u>Orange</u>	<u>Grapefruit</u>
Calcium Content	0.48%	0.45%
Total Acid Level	4.95%	7.16%
Ratio Citric:Malic	72:28	81:19

5. The orange and grapefruit juice concentrates of paragraph 4 were prepared according to the premix method of the present invention. In this method, a premix solution of solubilized calcium was initially prepared from the following ingredients:

<u>Ingredient</u>	<u>Orange</u>	<u>Grapefruit</u>
Calcium carbonate	3.03%	2.82%
Citric Acid (anhydrous)	3.88%	2.33%
Malic Acid	2.59%	2.91%
Liquid Sucrose (67.5° Brix)	65.8%	55.85%
Water	Balance	Balance

Calcium Content	1.21%	1.13%
Total Acid Level	6.47%	5.24%
Ratio Citric:Malic	60:40	44:56

The above ingredients were combined as follows: Citric and malic acid were added to the water and mixed in a blend tank until dissolved. Calcium carbonate was added to this acid solution and mixed until carbon dioxide evolution ceased. Liquid sucrose was then added and mixed to provide the premix solution.

The orange and grapefruit juice concentrates were obtained by adding and mixing together the following components in a blend tank:

-3-

<u>Component</u>	<u>Orange</u>	<u>Grapefruit</u>
Premix Solution	37.87%	37.67%
Concentrated Juice	38.06%	34.40%
Aqueous Essences	6.8%	-
Citrus Oils	0.02%	0.026%
Citrus Pulp	5.01%	5.31%
Color	0.006%	-
Vitamins	0.076%	0.06%
Water	Balance	Balance

6. At the March 2, 1987 interview, I also conducted demonstrations to show the problems caused by direct addition of calcium hydroxide and calcium carbonate to orange juice or to orange juice concentrate. The orange juice used in these demonstrations was prepared at my direction by diluting Citrus Hill Select frozen orange juice concentrate with distilled water in a 1 to 3 volume ratio. The orange juice concentrate used in these demonstrations was Citrus Hill Select frozen orange juice concentrate (juice solids content of 42° Brix) which had been thawed. These demonstrations are described in further detail in paragraphs 7 and 8 of this Declaration.
7. I conducted two demonstrations involving direct addition of calcium hydroxide to orange juice. These demonstrations are believed to be representative of what occurs during the direct addition of calcium hydroxide to orange juice or orange juice concentrate in a large blend tank typically used in commercial citrus juice operations. These large blend tanks mix the ingredients in such a way that fairly high, localized concentrations of calcium hydroxide can result in the juice or juice concentrate.

In the first demonstration, I added 1.1 grams of calcium hydroxide to 250 grams of orange juice. (If completely dissolved, this would yield a calcium content in the juice of 0.24%.) I found it very difficult to dissolve the calcium hydroxide in the juice, even with vigorous hand stirring. Photograph 2 attached to this Declaration, which shows orange juice samples before and after calcium hydroxide addition, is representative of what occurred during this first demonstration at the interview.

-4-

(Photograph 2 was taken approximately 10 minutes after addition of the calcium hydroxide to the juice.) As can be seen, the color of the orange juice significantly darkened after calcium hydroxide addition. Although not shown in photograph 2, the color of the juice actually became green in color at the interview. While not occurring at the interview, the juice can also slowly develop a fishy, amine odor.

In the second demonstration, I added 1.1 grams of calcium hydroxide to 125 grams of orange juice. (If completely dissolved, this would provide a calcium content of 0.48% in the juice.) Like the first demonstration, I found it very difficult to dissolve the calcium hydroxide in the juice. Photograph 3 attached to this Declaration, which shows orange juice samples before and after calcium hydroxide addition, is representative of what occurred during this second demonstration at the interview. (Photograph 3 was taken approximately 10 minutes after calcium hydroxide addition.) As can be seen, the color of the juice darkened after calcium hydroxide addition. Also, a gel formed which separated out. It is believed that this gel is the result of pectin in the juice which has been demethoxylated by the hydroxide and then reacted with the calcium. As occurred at the interview, the juice quickly developed a fishy, amine odor. This amine odor is believed to be due to the breakdown of proteins and amino acids present in the juice.

8. The demonstration of direct addition of calcium carbonate to orange juice concentrate is representative of what would occur in a blend tank typically used in commercial citrus juice operations. In this demonstration, I added a mixture of calcium carbonate (1.06 gram), citric acid (0.36 gram), and malic acid (0.98 gram) to 100 grams of orange juice concentrate. (If completely dissolved, this would provide a total calcium content of 0.46%, a total acid level (combined citric and malic acid) of 5.54% and a weight ratio of citric to malic acid of 70:30 in the concentrate.) I found it difficult to completely dissolve this mixture in the orange juice concentrate, even with vigorous hand stirring.

Photograph 4 attached to this Declaration, which shows orange juice concentrate samples before and after the addition of the mixture of calcium carbonate, citric acid, and malic acid, is representative of what occurred during this demonstration at the interview. (Photograph 4 was taken approximately 5 minutes after addition of the mixture.) As can be seen, the orange juice concentrate foamed considerably after addition of

-5-

this mixture due to carbon dioxide evolution as the result of the reaction of calcium carbonate with the acids. This foaming would make pumping and further processing of the concentrate difficult.

9. At the March 2, 1987 interview, a sample of single-strength orange juice to which calcium chloride had been added was offered to the Examiners. This sample was prepared at my direction by adding 1.1 gram of calcium chloride (dihydrate form) to 250 grams of single-strength orange juice which had been prepared by diluting Citrus Hill Select frozen orange juice concentrate with tap water in a 1 to 3 volume ratio. This sample contained 0.13% calcium and 0.21% chloride. As I remember at the interview, the Examiners, after tasting this sample, noticed the salty note imparted by the chloride.
10. At the March 2, 1987 interview, samples representative of products prepared according to Kaji et al were also shown to the Examiners. Photograph 5 is believed to be representative of the products shown, with and without the addition of vinegar. (Photograph 5 was taken approximately 30 days after preparation of the sample with vinegar and approximately 17 days after preparation of the sample without vinegar.) As can be seen in photograph 5, the sample with vinegar has a light brown solid at the bottom of uncertain composition, but which is believed to contain calcium citrate. As also shown in photograph 5, the sample without vinegar contains large amounts of white solid at the bottom which was identified at the interview as being calcium citrate.
11. The Kaji et al samples of Paragraph 10 were prepared from the following ingredients:

<u>Ingredient</u>	<u>Wt. %</u>
Calcium Hydroxide	1.22
Citric Acid (monohydrate)	0.771
Malic Acid	0.779
Lactic Acid	0.826
Dextrose*	2
Sucrose*	1
Orange Juice	3
Lemon Juice	1
Water	89.4

*Replaces fruit sugar and invert sugar of Kaji et al

-6-

The above ingredients were combined as follows: Citric, malic and lactic acid (50% solution) were dissolved in distilled water. Calcium hydroxide was added to this acid solution and mixed in. Dextrose and sucrose were then added and mixed in. Single-strength orange juice (prepared from Citrus Hill Select frozen orange juice concentrate diluted with distilled water in a 3 to 1 volume ratio), and lemon juice (Minute Maid 100% pure lemon juice) were then added and mixed in. In the case of the sample without vinegar, this solution was put into 16 ounce bottles and then capped. This sample without vinegar had a calcium content of 0.66% and a pH of 4.8. In the case of the sample with vinegar, apple cider vinegar was added to this solution (308 grams per 1,000 grams of sample prepared) to adjust the pH to 4.0, which is the preferred procedure in Kaji et al. This vinegar-containing solution was put into 16 ounce bottles and then capped. The sample with vinegar had a calcium content of 0.50%. The amount of vinegar added is so high as to make this sample virtually unpalatable.

12. At my direction, four calcium-fortified orange juice samples (A, B, C and D) having the following levels of added calcium, added citric and malic acid, added chloride, % added calcium from calcium chloride, and pH were paneled:

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
Added calcium (%)	0.12	0.12	0.12	0.12
Added citric acid (%)	0.017	0.013	0.009	0.005
Added malic acid (%)	0.327	0.250	0.173	0.096
Added chloride (%)	0	0.043	0.086	0.129
% Ca from chloride	0	20	40	60
pH	4.04	3.96	3.88	3.79

Twenty-six untrained panelists who typically panel beverage products were used. Each panelist rated all four samples. Each sample was rated on a scale of 1 to 9 for sweetness, sourness, bitterness, salty/brackish taste, and taste quality, using the form identified as "Taste Test" attached to this Declaration. The results of this paneling are shown in the following table:

-7-

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
Sweetness	4.23	4.27	4.27	4.19
Sourness	4.65	4.38	4.00	3.65
Bitterness	2.58	2.77	2.46	2.65
Salty/brackish	2.15	2.62*	3.31**	4.96**
Taste quality	4.77	4.69	4.15	2.88

*Not statistically significant difference relative to sample A
at a 95% confidence level.

**Statistically significant difference relative to sample A
at a 95% confidence level.

13. The calcium-fortified orange juice samples paneled in paragraph 12 were prepared from the following ingredients:

<u>Ingredients</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
Citric acid (%)	0.0172	0.013	0.009	0.005
Malic acid (%)	0.327	0.250	0.173	0.096
Calcium hydroxide (%)	0.224	0.179	0.134	0.090
Calcium chloride dihydrate (%)	0	0.089	0.178	0.267
Orange juice concentrate (%)	28.23	28.23	28.23	28.23
Water (%)	71.20	71.24	71.28	71.31

The above ingredients were combined as follows: citric and malic acid were added to the water and dissolved. Calcium hydroxide was then added to this acid solution and mixed in. For samples B, C and D, calcium chloride dihydrate was then added and mixed in. Finally, orange juice concentrate (Citrus Hill Select frozen orange juice concentrate) was added and mixed in to provide the orange juice sample.

-8-

I further declare that all statements made of my own knowledge are true and that all statements made on information and belief are true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above application or any patents issuing therefrom.

Timothy W. Dake
Timothy W. Dake

May 7, 1987
Date

3528a

TASTE TEST

No: _____

EMPLOYEE ID#: _____

NAME: _____

DATE: _____

TASTE ORDER: _____

LOCATION: _____

WE WOULD LIKE YOU TO EVALUATE THE FOLLOWING FOUR ORANGE JUICE PRODUCTS FOR SWEETNESS, SOURNESS, BITTERNESS, SALTY/BRACKISH TASTE AND TASTE QUALITY.

SWEETNESS

1	2	3	4	5	6	7	8	9
NONE		SLIGHT		MODER.		HIGH		V. HIGH

SOURNESS

1	2	3	4	5	6	7	8	9
NONE		SLIGHT		MODER.		HIGH		V. HIGH

BITTERNESS

1	2	3	4	5	6	7	8	9
NONE		SLIGHT		MODER.		HIGH		V. HIGH

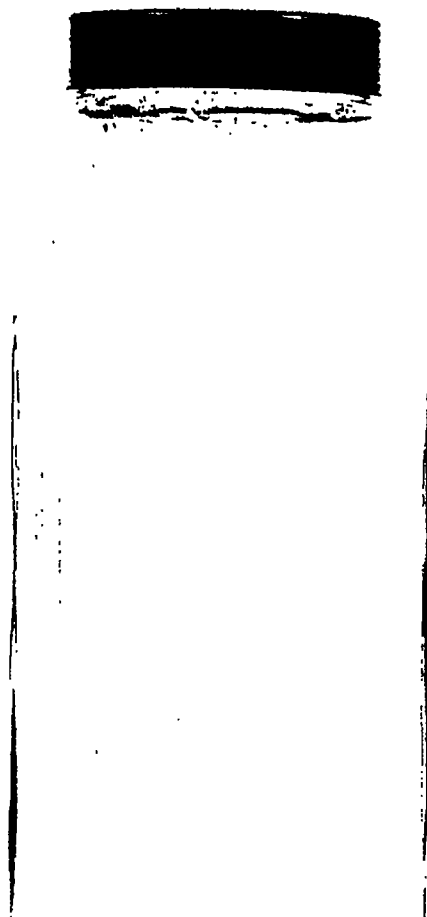
SALTY/BRACKISH TASTE

1	2	3	4	5	6	7	8	9
NONE		SLIGHT		MODER.		HIGH		V. HIGH

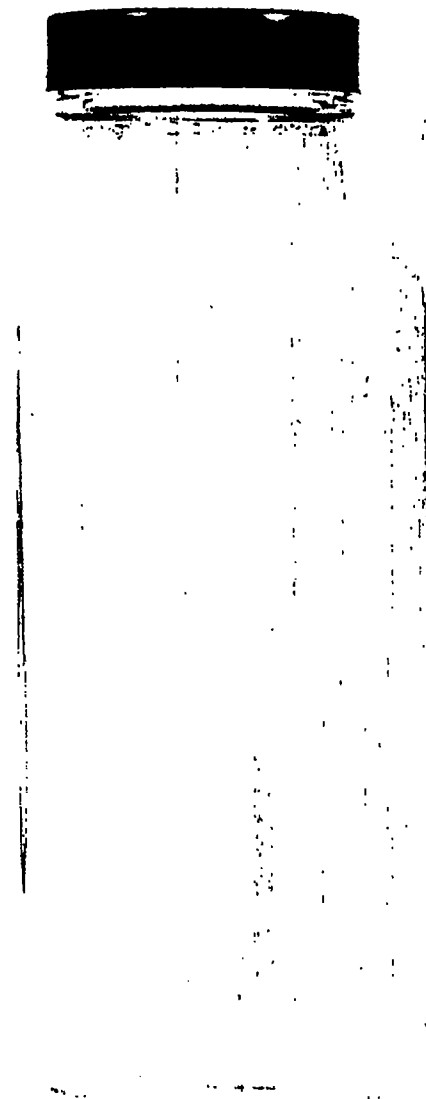
TASTE QUALITY

1	2	3	4	5	6	7	8	9
BAD		POOR		ACCEPT- ABLE		V. GOOD		EXCELL- ENT

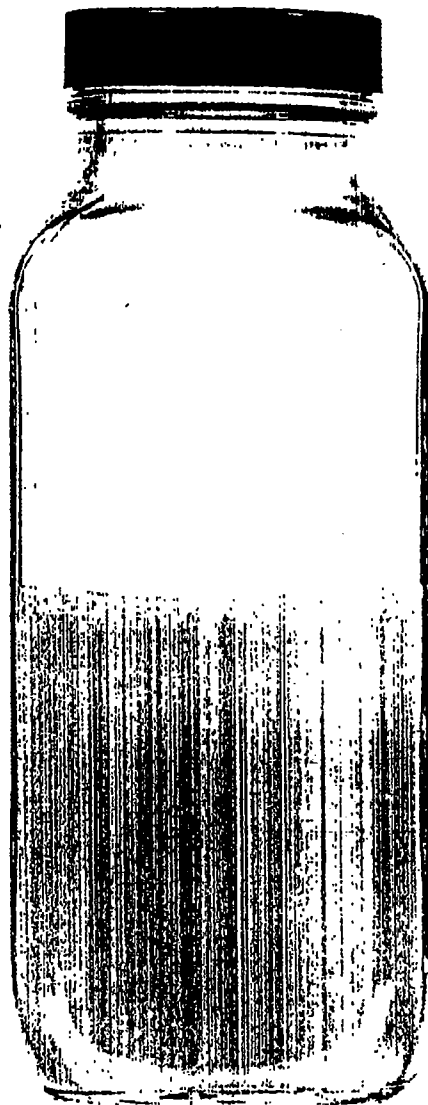
THANKS FOR YOUR COOPERATION .



PRESENT INVENTION
60% Orange Juice



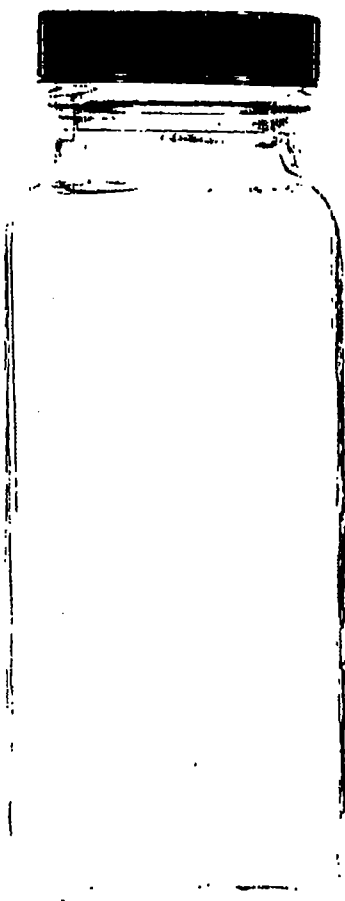
PRESENT INVENTION
60% Grapefruit Juice



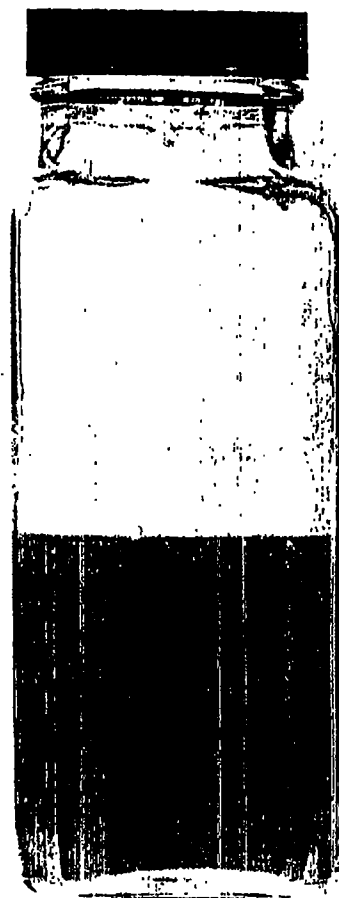
Orange Juice
before $\text{Ca}(\text{OH})_2$ addition



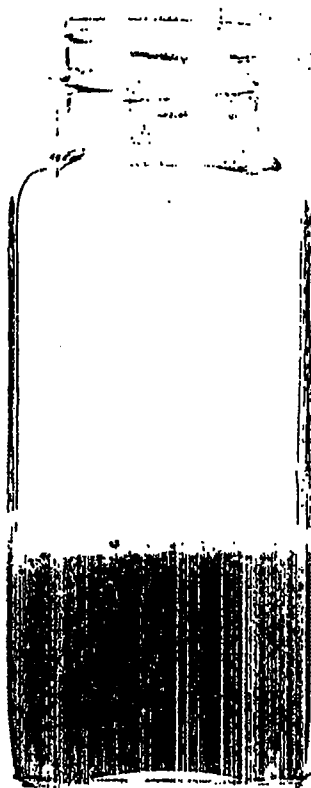
Orange Juice
after $\text{Ca}(\text{OH})_2$ addition



Orange Juice
before $\text{Ca}(\text{OH})_2$ addition



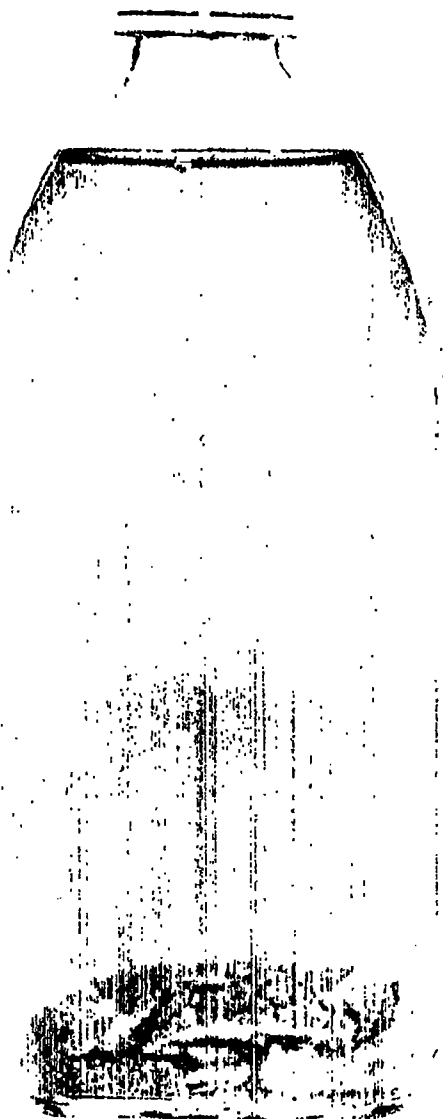
Orange Juice
after $\text{Ca}(\text{OH})_2$ addition



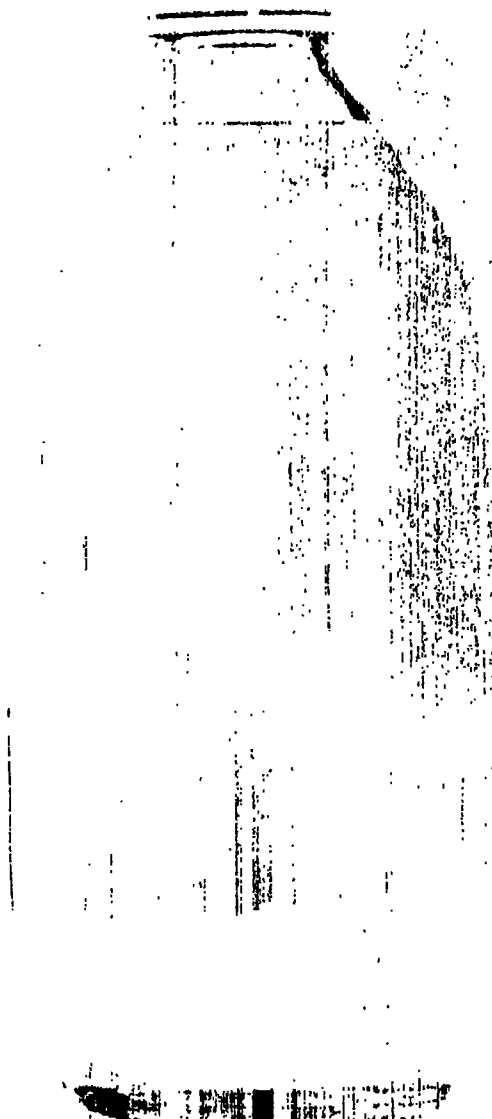
Orange Juice Concentrate
before CaCO₃:Citric:Malic addition



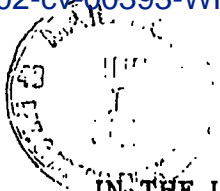
Orange Juice Concentrate
after CaCO₃:Citric:Malic addition



**Kaji
with vinegar**



**Kaji
without vinegar**



131
071

06/10/87
CASE 3528

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of

DAVID C. HECKERT

Serial No. 860,607

Filed May 7, 1986

: Group Art Unit 132

: Examiner C. Paden

FRUIT JUICE BEVERAGES AND

JUICE CONCENTRATES NUTRI-

TIONALLY SUPPLEMENTED WITH CALCIUM

[Handwritten signature]
6-23-87

ASSOCIATE POWER OF ATTORNEY

and

ADDRESSING CORRESPONDENCE

The Commissioner of Patents and Trademarks

Washington, D. C. 20231

Dear Sir:

You are requested to recognize RONALD L. HEMINGWAY, Registration No. 25,341, as associate attorney, to prosecute this application, to make alterations and amendments therein, and to transact all business in the Patent and Trademark Office, connected with the application or with the patent granted thereon.

You are requested to continue to address all future correspondence in the above-identified application to ERIC W. GUTTAG, whose address is:

The Procter & Gamble Company
Winton Hill Technical Center
6210 Center Hill Road
Cincinnati, Ohio 45224

Respectfully submitted,

DAVID C. HECKERT

By *Eric W. Gutttag*
Eric W. Gutttag
Attorney for Applicant
Reg. No. 28,853

Cincinnati, Ohio
(513) 659-2736
June 1, 1987


UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

 Address COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
6/860,607	05/07/86	HECKERT	3328

 ERIC W. GUTTAG
 THE PROCTOR & GAMBLE COMPANY
 6071 CENTER HILL ROAD
 WINTON HILL TECHNICAL CENTER
 CINCINNATI, OHIO 45224-1791

EXAMINER	
PADEN, C. Paden	
ART UNIT	PAPER NUMBER
132	9

DATE MAILED:

08/07/87

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined
 ☒ Responsive to communication filed on 6-1-87
 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
 Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-848. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449 | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152 |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474 | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-29 are pending in the application.
 Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☒ Claims 1-18 are allowed.
4. ☒ Claims 19-29 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are ☐ acceptable; ☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections **MUST** be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other _____

Serial No. 860,607

-2-

Art Unit 132

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not understood what is formed in claim 19, step a. Are four ingredients mixed together, e.g. calcium, water, citric acid and malic acid? It is not seen that any and all ratios of calcium to water will result in the desired meta-stable aqueous premix.

Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as the disclosure is enabling only for claims limited that disclosed in demonstrations 1-3. See MPEP 706.03(n) and 706.03(z).

It is not seen that the use of a premix containing orange juice is functional for any and all calcium sources. (Note demonstrations that calcium hydroxide is not soluble in orange juice and further reacts with the beverage. Note also demonstration 3 wherein the use of calcium carbonate results in a foamed beverage in orange juice).

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which

Serial No. 860,607

-3-

Art Unit 132

qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 19-29 are rejected under 35 U.S.C. 103 as being unpatentable over Nakel et al for reasons of record.

Applicant argues that the premix of Nakel et al is not critical. This argument has been considered but is not persuasive of error since column 5, lines 22-30 of Nakel et al disclose problems associated with the addition of calcium and acids to beverages. Note also at column 6, lines 43-47 of Nakel et al the use of fruit juices in such beverages is contemplated. Applicant urges that Nakel et al does not utilize the higher levels of calcium employed by applicant. This argument has been considered but is not persuasive of error since to vary the ingredients of Nakel et al to achieve the desired result is not seen to constitute unobviousness particularly wherein Nakel et al provides a series of ranges wherein combinations of ingredients are functional. The fact that the purpose of such combinations is different from that of applicant is not seen to constitute unobviousness particularly wherein applicant himself admits that the flavor of the final product is an essential component of process purpose. Applicant urges that the scale up of the Nakel et al technology would result in a product with excessive saltiness. Applicant further urges that the Dake

Serial No. 860,607

-4-

Art Unit 132

declaration relating to calcium chloride supports this assertion. This argument has been considered but is not persuasive of error since the claims as written are not directed to calcium chloride per se. Rather they are directed to a host of calcium-containing ingredients. Applicants arguments with respect to claim 23 have been considered but are not persuasive of error for the reasons discussed above with respect to the rejection under 35 USC 112. With respect to sugar recited in claim 24, column 5 lines 10-34 of Nakel et al teaches prevention of solubility problems thus it remains the examiners position that the use of the supplemental ingredients recited in claim 24 and 29 is seen to be a matter of choice. With respect to claim 28, applicant urges that the calcium content is higher than that of the references and that such high levels of calcium would result in an undesirable product. This argument has been considered but is not persuasive of error for the reasons discussed above with respect to process claim 19 (Note In re Thorpe 227 USPQ 964).

Claims 1-18 are allowable over the prior art of record.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER

Serial No. 860,607

-5-

Art Unit 132

THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 CFR 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Paden whose telephone number is (703) 557-9803.


Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 557-2475.

Pad 7-17-87
Paden:df

703-557-9803

7-13-87

7-15-87


RAYMOND N. IGNES
SUPERVISORY PATENT EXAMINER
ART UNIT 132

8-3-87

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

RESPONSE/AMENDMENT

Case Docket No. 3528

U.S. COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

Dear Sir:

Transmitted herewith is a RESPONSE for the patent application:

Inventor(s): David C. Heckert

Serial No.: 860,607

Date Filed: May 7, 1986

Title: Fruit Juice Beverages and Juice Concentrate
Nutritionally Supplemented with Calcium

CORRES. AND MAIL

RESPONSE UNDER 37 CFR 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 132

1. ☒ No additional fee is known to be required.
2. ☐ The fee has been calculated as shown below:

	(Col. 1)		(Col. 2)	(Col. 3)	OTHER THAN A SMALL ENTITY	
	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NO. PREVIOUSLY PAID FOR	PRESENT EXTRA*	RATE	FEE
TOTAL		MINUS	**	=	x \$12 =	\$
INDEP.		MINUS	***	=	x \$34 =	\$
FIRST PRESENTATION OF MULTIPLE DEP. CLAIM					+ \$110 =	\$
TOTAL						\$

* If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.

** If the highest number of total claims previously paid for is less than 20, write "20" in this space.

*** If the highest number of independent claims previously paid for is less than 3, write "3" in this space.

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

3. ☐ The Commissioner is hereby petitioned under 37 CFR §1.136(a) to grant any extension of time needed for timely response to the Office Action dated _____ in the above-identified application to preserve pendency of said application. The processing fee under 37 CFR §1.17 has been determined as follows: \$ _____ for a _____ month extension of time.
4. The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 16-2480. A duplicate copy of this sheet is attached.
- a. ☒ Any patent application processing fees under 37 CFR §1.16.
- b. ☒ Any patent application processing fees under 37 CFR §1.17.
5. The Commissioner is hereby authorized to make any additional copies of this sheet needed to accomplish the purposes provided for herein and to charge any fee for such copies to Deposit Account No. 16-2480.

Date: August 19, 1987
Cincinnati, Ohio

Eric W. Gutttag
Eric W. Gutttag
Attorney for Applicant(s)
Registration No. 28,853
Tel. No. 513-659-2736

**BOX A**

CASE 3528

AUG 25 1987

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of

DAVID C. HECKERT

Serial No. 860,607

Filed May 7, 1986

FRUIT JUICE BEVERAGES AND

JUICE CONCENTRATES NUTRI-

TIONALLY SUPPLEMENTED WITH CALCIUM

:

:

:

Group Art Unit 132

Examiner C. Paden

10/28/87
8-26-87
RESPONSE UNDER 37 CFR 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 132CAP
8/26/87

CAP

8-27-87

Amendment After Final Rejection Pursuant to 37 CFR 1.116

The Commissioner of Patents and Trademarks

Washington, D.C. 20231

Dear Sir:

In response to the Office Action (made Final) mailed August 7, 1987, please amend the above application as follows. Applicant respectfully requests that these amendments be entered in order to put the above application in condition for allowance.

IN THE CLAIMS

Please cancel, without prejudice, Claims 19 to 29.

REMARKS

Applicant respectfully requests that the above application, as amended, be reconsidered. After amendment, Claims 1 to 18 are currently pending in the above application.

The Examiner has rejected Claim 19 to 29 under 35 USC 103 as unpatentable over Nakel et al. The Examiner has additionally rejected Claim 19 under 35 USC 112, second paragraph, as indefinite, and Claim 23 under 35 USC 112, first paragraph, for lack of enabling disclosure.

-2-

In response to these rejections, Applicant has cancelled Claims 19 to 29, without prejudice. Applicant retains the right to pursue the subject matter of these Claims in a subsequent continuation application.

Since the Examiner has indicated that remaining Claims 1 to 18 are allowable over the prior art of record, Applicant respectfully requests that the Examiner issue a Notice of Allowance promptly for the above application.

Respectfully submitted,

DAVID C. HECKERT

By Eric W. Gutttag
Eric W. Gutttag
Attorney for Applicant
Reg. No. 28,853

Cincinnati, Ohio
(513) 659-2736
August 19, 1987

Mailing Certificate Under 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to The Commissioner of Patents and Trademarks, Washington, D.C. 20231, on August 19, 1987.

Eric W. Gutttag, August 19, 1987
Eric W. Gutttag Date
Attorney for Applicant



UNITED STATES DEPARTMENT OF COMMERCE
 Patent and Trademark Office
 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
06/860,607	05/07/86	HECKERT	D 3528

ERIC W. GUTTAG
 THE PROCTOR & GAMBLE COMPANY
 6071 CENTER HILL ROAD
 WINTON HILL TECHNICAL CENTER
 CINCINNATI, OHIO 45224-1791

EXAMINER	
PADEN <i>Paden</i>	
ART UNIT	PAPER NUMBER
1322	11

DATE MAILED:

08/31/87

NOTICE OF ALLOWABILITY

PART I.

1. ☒ This communication is responsive to the amendment filed 8-21-87
2. ☒ All the claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
3. ☒ The allowed claims are 1-18
4. ☒ The drawings filed on 5-7-86 are acceptable.
5. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received. ☐ not been received. ☐ been filed in parent application Serial No. _____, filed on _____.
6. ☐ Note the attached Examiner's Amendment.
7. ☐ Note the attached Examiner Interview Summary Record, PTOL-413.
8. ☐ Note the attached Examiner's Statement of Reasons for Allowance.
9. ☐ Note the attached NOTICE OF REFERENCES CITED, PTO-892.
10. ☐ Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

PART II.

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

1. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
2. ☐ APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
 - a. ☐ Drawing Informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-948, attached hereto or to Paper No. _____. CORRECTION IS REQUIRED.
 - b. ☐ The proposed drawing correction filed on _____ has been approved by the examiner. CORRECTION IS REQUIRED.
 - c. ☐ Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT. CORRECTION IS REQUIRED.
 - d. ☐ Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

Attachments:

- | | |
|---|---|
| - Examiner's Amendment | - Notice of Informal Application, PTO-152 |
| - Examiner Interview Summary Record, PTOL-413 | - Notice re Patent Drawings, PTO-948 |
| - Reasons for Allowance | - Listing of Bonded Draftsmen |
| - Notice of References Cited, PTO-892 | - Other |
| - Information Disclosure Citation, PTO-1449 | |

Raymond N. Jones
 RAYMOND N. JONES
 SUPERVISORY PATENT EXAMINER
 ART UNIT 132
 8/27/87


**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

**NOTICE OF ALLOWANCE
AND ISSUE FEE DUE**

 ERIC W. GUTTAG
THE PROCTOR & GAMBLE COMPANY
6071 CENTER HILL ROAD
WINTON HILL TECHNICAL CENTER
CINCINNATI, OHIO 45224-1791

All communications regarding this application should give the serial number, date of filing, name of applicant, and batch number.

Please direct all communications to the Attention of "OFFICE OF PUBLICATIONS" unless advised to the contrary.

 The application identified below has been examined and found allowable for issuance of Letters Patent. **PROSECUTION ON THE MERITS IS CLOSED.**

SC/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
06/860,607	05/07/86	018	PADEN, C	132 08/31/87
First Named Applicant	HECKERT,	DAVID C.		

 TITLE OF INVENTION **FRUIT JUICE BEVERAGES AND JUICE CONCENTRATES NUTRITIONALLY SUPPLEMENTED WITH CALCIUM**

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3528	426-074.001	D05	UTILITY	NO	\$560.00	11/30/87

The amount of the issue fee is specified by 37 C.F.R. 1.18 as follows: for an original or reissue patent, except for a design or plant patent, \$500; for a design patent, \$175; and for a plant patent, \$250. If the applicant qualifies for and has filed a verified statement of small entity status in accordance with 37 C.F.R. 1.27, the issue fee is one-half the respective amount aforementioned. The issue fee due printed above reflects applicant's status as of the time of mailing this notice. A verified statement of small entity status may be filed prior to or with payment of the issue fee. However, in accordance with 37 C.F.R. 1.28, failure to establish status as a small entity prior to or with payment of the issue fee precludes payment of the issue fee in the amount so established for small entities and precludes a refund of any portion thereof paid prior to establishing status as a small entity.

THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE as indicated above. The application shall otherwise be regarded as ABANDONED. The issue fee will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the Patent and Trademark Office. Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of the notice of allowance, the issue fee is charged to the deposit account at the time of mailing of this notice in accordance with 37 C.F.R. 1.311. If the issue fee has been so charged, it is indicated above.

In order to minimize delays in the issuance of a patent based on this application, this Notice may have been mailed prior to completion of final processing. The nature and/or extent of the remaining revision or processing requirements may cause slight delays of the patent. In addition, if prosecution is to be reopened, this Notice of Allowance will be vacated and the appropriate Office action will follow in due course. If the issue fee has already been paid and prosecution is reopened, the applicant may request a refund or request that the fee be credited to a Deposit Account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a Deposit Account.

In the case of each patent issuing without an assignment, the complete post office address of the inventor(s) will be printed in the patent heading and in the Official Gazette. If the inventor's address is now different from the address which appears in the application, please fill in the information in the spaces provided on PTOL-85b enclosed. If there are address changes for more than two inventors, enter the additional addresses on the reverse side of the PTOL-85b.

The appropriate spaces in the ASSIGNMENT DATA section of PTOL-85b must be completed in all cases. If it is desired to have the patent issue to an assignee, an assignment must have been previously submitted to the Patent and Trademark Office or must be submitted not later than the date of payment of the issue fee as required by 37 C.F.R. 1.334. Where there is an assignment, the assignee's name and address must be provided on the PTOL-85b to ensure its inclusion in the printed patent.

Advance orders for 10 or more printed copies of the prospective patent can be made by completing the information in Section 4 of PTOL-85b and submitting payment therewith. If use of a Deposit Account is being authorized for payment, PTOL-85c should also be forwarded. The order must be for at least 10 copies and must accompany the issue fee. The copies ordered will be sent only to the address specified in section 1 or 1A of PTOL-85b.

☐ Note attached communication from Examiner.

☐ This notice is issued in view of applicant's communication filed _____

IMPORTANT REMINDER

Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. See 37 CFR 1.20 (e)-(j).

ISSUE FEE TRANSMITTAL

U.S. Department of Commerce
Patent and Trademark Office

This form is provided in lieu of a formal transmittal and should be used for transmitting the Issue Fee. Sections 1A through 4 must be completed as appropriate.

INVENTOR'S ADDRESS CHANGE | SC/SERIAL NO.

INV. INVENTOR'S NAME: Eric W. Gutttag

Street Address: 6210 Center Hill Road

City, State and Zip Code: Cincinnati, Ohio 45224

CO-INVENTOR'S NAME: David C. Heckert

Street Address: 1508 8th St

City, State and Zip Code: Washington, D. C. 20231

Eric W. Gutttag
Registration No. 28,853

☐ Check if additional changes are on reverse side.

MAILING INSTRUCTIONS

All further correspondence including the Issue Fee Receipt, the Patent, and advanced orders will be mailed to the addressee entered in section 1 on PTOL-850, unless you direct otherwise by specifying the appropriate name and address in 1A below. (Note: See box 5 below for correspondence concerning maintenance fee payments.)

2A. The COMMISSIONER OF PATENTS AND TRADEMARKS is requested to apply the Issue Fee to the application identified below.

Eric W. Gutttag

(Signature of party in interest of record) (Date)

Eric W. Gutttag 9/3/87

Note: The Issue Fee will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.

EXPEDITE

SC/SERIAL NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
06/860,607	05/07/86	018	PADEN, C	132 08/31/87

First Named Applicant: HECKERT, DAVID C.

TITLE OF INVENTION: FRUIT JUICE BEVERAGES AND JUICE CONCENTRATES NUTRITIONALLY SUPPLEMENTED WITH CALCIUM

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
0528	126-074,001	005	UTILITY	NO	\$560.00	11/30/87

Further correspondence to be mailed to the following:

Eric W. Gutttag
The Procter & Gamble Company
6210 Center Hill Road
Cincinnati, Ohio 45224

2B. For printing on the patent front page, list the names of not more than 3 registered patent attorneys or agents OR, alternatively, the name of a firm having as a member a registered attorney or agent. If no name is listed, no name will be printed.

1	Eric W. Gutttag
2	Ronald L. Hemingway
3	Richard C. Witte

P 30146 09/29/87 860607/
P 30147 09/29/87 860607

DO NOT USE THIS SPACE

16-2480 030 142 560.00CH /
16-2480 030 502 22.50CH /

ASSIGNMENT DATA (print or type) ATTENTION IS DIRECTED TO 37 C.F.R. 1.334

☐ This application is NOT assigned.
☒ Assignment previously submitted to the Patent and Trademark Office.
☐ Assignment submitted herewith.

For Printing On The Patent: (Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data below is only appropriate when an assignment has been previously submitted to the PTO or is submitted herewith. Completion of this form is NOT a substitute for filing of an assignment as required by 37 C.F.R. 1.334).

(1) NAME OF ASSIGNEE: The Procter & Gamble Company

(2) ADDRESS: (City & State or Country) Cincinnati, Ohio

(3) STATE OF INCORPORATION, IF ASSIGNEE IS A CORPORATION: Ohio

4. The following fees are enclosed: ☐ Issue Fee ☐ Advanced order ☐ Assignment recording

The following fees should be charged to: deposit acct. no. 16-2480
(PTOL-85c or additional copy of PTOL-85b must be enclosed)

☒ Issue fee ☒ Advanced order ☐ Assignment recording

Number of advanced order copies requested: 15
(must be for 10 or more copies)

5. All correspondence relating to maintenance fees will be addressed to the correspondence address unless a separate "Fee Address" is provided to the Patent and Trademark Office [37 CFR 1.363]. A "Fee Address" may be submitted by the owner of record with the payment of the issue fee or thereafter by using form PTO-1537.

TRANSMIT THIS FORM WITH FEE



CASE 3528

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re:

DAVID C. HECKERT

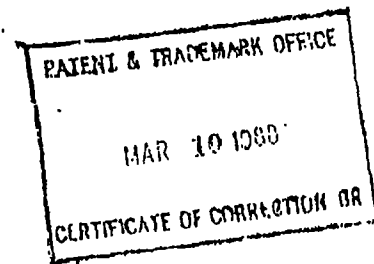
U.S. Patent 4,722,847

Issued February 2, 1988

Serial No. 860,607

Filed May 7, 1986

FRUIT JUICE BEVERAGES AND
JUICE CONCENTRATES NUTRITIONALLY
SUPPLEMENTED WITH CALCIUM



Notice of Errors in Issued Patent Pursuant to MPEP §1480

The Commissioner of Patents and Trademarks

Washington, D.C. 20231

Dear Sir:

In accordance with M.P.E.P. §1480, the patentee requests that this paper be made of record in the patented file to give notice of the following errors in the above patent:

IN THE SPECIFICATION

- Col. 2, line 43, "deseration" should read -- deacration --;
- Col. 2, line 47, "deserated" should read -- deacrated -- .
- Col. 3, line 61 "chlorideton" should read -- chloride ion -- .
- Col. 4, line 67, "poel" should read -- peel -- .
- Col. 5, line 11, "empolyed" should read -- employed -- .
- Col. 5, lines 24 and 25, delete "To be useful in the present invention, the calcium hydroxide.".
- Col. 6, line 45, "amidos" should read -- amides -- ;
- Col. 6, line 50 "L-1-hydroxymethylalkancamide" should read "L-1-hydroxymethylalkanamide -- ;
- Col. 6, line 47, "Jahusz" should read -- Janusz -- .
- Col. 7, line 60, "(47Ca) should read (⁴⁷Ca) -- .

-2-

IN THE CLAIMS

Col. 13, line 18 (Claim 1, line 4), "0.06" should read -- 0.05 -- .

These mistakes are of such a minor nature that the meaning intended is believed to be obvious from the context, thus making the issuance of a certificate of correction inappropriate.

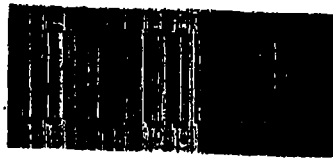
Respectfully submitted,

DAVID C. HECKERT

By Eric W. Guttag
Eric W. Guttag
Attorney for Patentee
Reg. No. 28,853

Cincinnati, Ohio
(513) 659-2736
February 22, 1988

860607



Entered

CONTENTS

1. Applications 11 papers. Aug 31 1986
2. 12/2
3. Rejection 3 months 12-15-86 12/2
4. Interview Summary 3/2/87 0 8m
5. 12-15-86 5-2-87
6. 12-15-86 11/11/87
7. 12-15-86 11/11/87
8. 12-15-86 11/11/87
9. 12-15-86 8-7-87 2/13
10. 12-15-86 11/11/87
11. 12-15-86 Aug. 31, 1987 8/25
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____
27. _____
28. _____
29. _____
30. _____
31. _____
32. _____

